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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/689,444

10/20/2003

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05/14/2008

EXAMINER

THOMAS, JASON M

ART UNIT

PAPER NUMBER

2623

MAIL DATE

DELIVERY MODE

05/14/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/689,444	Applicant(s) LIANG, KAI-CHIEH	
	Examiner Jason Thomas	Art Unit 2623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-47 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-47 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 October 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>10/20/03</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This is the initial Office Action based on the 10/689,444 application filed on October 20, 2003. Claims 1-47, as originally filed, are currently pending and have been considered below.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 1, 14, 25 and 38 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 15, 26 and 40 of copending Application No. 10/670,949 in view of Djupsjobacka et al. (EP 0 854 650 A2) and Carsten Herpel ("Elementary Stream Management in MPEG-4" published in IEEE, March 1999).

10/689,444 (Instant Application)	10/670,949 (Copending Patent)
<p>1. A method for receiving of MPEG-4 data resources broadcast in a European Digital Video Broadcasting (DVB) network, the method comprising: at a DVB-Multimedia Home Platform (MHP) terminal, receiving an MPEG-2 Transport Stream (TS), with a packetized DSM-CC User-to-User (U-U) Object Carousel (OC); locating a universal resources identifier (URI) in the TS; in response to the URI, accessing an address in the DSM-CC U-U OC; in response to accessing the address, retrieving MPEG-4 resources from the DSM-CC U-U OC; and decoding the MPEG-4 resources.</p>	<p>1. A uniform resource indicator (URI) pointer method for the retrieving MPEG-4 data pointers in an MPEG-2 transport stream (TS), the method comprising: receiving an MPEG-2 TS; locating a URI in the TS; in response to the URI, accessing an address; in response to accessing the address, retrieving MPEG-4 resources; and, decoding the MPEG-4 resources.</p>
<p>14. A method for broadcasting pointers to MPEG-4 data in a European Digital Video Broadcasting (DVB) network, the method comprising: embedding MPEG-4 resources in an DSM-CC User-to-User (U-U) Object Carousel (OC); packetizing the DSM-CC U-U OC in an MPEG-2 transport stream (TS); generating a universal resource identifier (URI) for accessing MPEG-4 resources located at an address in the DSM-CC U-U OC; embedding the URI in an MPEG-2 TS; and broadcasting the MPEG-2 TS, with the packetized DSM-CC</p>	<p>15. A uniform resource indicator (URI) pointer method for broadcasting pointers to MPEG-4 data in an MPEG-2 transport stream (TS), the method comprising: generating a URI for accessing MPEG-4 resources located at an address; embedding the URI in an MPEG-2 TS; and, broadcasting the MPEG-2 TS.</p>

U-U OC.	
<p>25. A European Digital Video Broadcasting (DVB) Multimedia Home Platform (MHP) terminal for receiving broadcast MPEG-4 data resources, the system comprising: a receiver having an interface for accepting an MPEG-2 transport stream (TS) with an embedded uniform resource indicator (URI) 10 and a packetized DSM-CC User-to-User (U-U) Object Carousel (OC); an address access unit having an interface to accept the MPEG-2 TS from the receiver, the address access unit locating a URI in the TS, accessing an address, and retrieving MPEG-4 resources from the DSM-CC U-U OC; and a decoder having an interface connected to the address access unit for receiving the MPEG-4 resources and an interface for supplying decoded MPEG-4 information.</p>	<p>26. In a receiver for decoding MPEG-4 data, a uniform resource indicator (URI) pointer system for accessing pointers to MPEG-4 data from an MPEG-2 transport stream (TS), the system comprising: a receiver having an interface for accepting an MPEG-2 TS with an embedded URI for accessing MPEG-4 resources; an address access unit having an interface to accept the MPEG-2 TS from the receiver, the address access unit locating a URI in the TS, accessing an address, and retrieving MPEG-4 resources; and, a decoder having an interface connected to the address access unit for receiving the MPEG-4 resources and supplying decoded the MPEG-4 information.</p>
<p>38. A European Digital Video Broadcasting (DVB) system for transmitting MPEG-4 resources, the system comprising: an address pointer unit (APU) having an interface to supply an MPEG-2 transport stream (TS) with uniform resource identifiers (URIs) for accessing MPEG-4 resources embedded in an DSM-CC User-to-User (U-U) Object Carousel (OC), and to supply a MPEG-2 TS with the</p>	<p>40. In an MPEG-4 broadcaster, a uniform resource indicator (URI) pointer system for supplying an MPEG-2 transport stream (TS) with URIs for accessing MPEG-4 data, the system comprising: an address pointer unit (APU) having an interface to supply an MPEG-2 TS with URIs for accessing MPEG-4 resources; and, a transmitter having an interface to accept the MPEG-2 TS from the</p>

packetized DSM-CC U-U OC; and a transmitter having an interface to accept the MPEG-2 TS, with the packetized DSM-CC U-U OC from the address pointer unit, and an interface to broadcast the MPEG-2 TS.	address pointer unit and to broadcast the MPEG-2 TS.
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Regarding claim 1: Claim 1 of copending Application No. 10/670,949 recites a uniform resource indicator pointer method for retrieving MPEG-4 data pointers in an MPEG-2 transport stream (TS). The method of claim 1 differs from claim 1 herein in that it fails to disclose: using a DVB-Multimedia Home Platform terminal; using a packetized Digital Storage Media (DSM) Command and Control (CC) User to User (U-U) object carousel (OC); and accessing an address in the DSM-CC U-UU OC. Pereira teaches transporting MPEG-4 over MPEG-2 transport stream such that a MPEG-4 terminal can receive it. Djupsjobacka teaches using DSM-CC U-U OC which includes packetizing and accessing resources through included address data. Therefore it would have been obvious to modify the method of claim 1 of copending Application No. 10/670,949 such that the receiving terminal would be an MPEG-4 ready receiving terminal as taught in Pereira which would be used to receive packetized resources accessed through DSM-CC U-U OC addressing methods as taught in Djupsjobacka.

Regarding claim 14: Claim 15 of copending Application No. 10/670,949 recites a uniform resource indicator pointer method for broadcasting MPEG-4 data pointers in a European digital video broadcasting network. The method of claim 15 differs from claim

14 herein in that it fails to disclose: embedding MPEG-4 resources in an DSM-CC U-U OB; and packetizing the DSM-CC U-U OC in an MPEG-2 TS. Pereira teaches transporting MPEG-4 resources over MPEG-2 transport stream such that a MPEG-4 terminal can receive it over a DVB. Djupsjobacka teaches using a DVB to use a DSM-CC U-U OC which includes packetizing and accessing resources which have been embedded in a DSM-CC U-U OC through included address data. Therefore it would have been obvious to modify the method of claim 15 of copending Application No. 10/670,949 such that the receiving terminal would be an MPEG-4 ready receiving terminal as taught in Pereira which would be used to receive packetized resources which were embedded using DSM-CC U-U OC protocols as taught in Djupsjobacka.

Claim 25 of copending Application No. 10/670,949 recites a uniform resource indicator pointer method for retrieving MPEG-4 data pointers in an MPEG-2 transport stream (TS). The method of claim 26 differs from claim 25 herein in that it fails to disclose: using a DVB-Multimedia Home Platform terminal for receiving broadcast MPEG-4 data resources the system comprising: a receiver capable of accepting packetized DSM-CC U-U OC data; and cable of retrieving MPEG-4 resources from the DSM-CC U-U OC. Pereira teaches transporting MPEG-4 over MPEG-2 transport stream such that a MPEG-4 terminal can receive it. Djupsjobacka teaches using DSM-CC U-U OC which includes retrieving packetizing resources through included address data. Therefore it would have been obvious to modify the method of claim 26 of copending Application No. 10/670,949 such that the receiving terminal would be an MPEG-4 ready receiving terminal as taught in Pereira which would be used to receive

packetized resources accessed through DSM-CC U-U OC addressing methods as taught in Djupsjobacka.

Claim 40 of copending Application No. 10/670,949 recites a European DVB system for transmitting MPEG-4 resources. The method of claim 40 differs from claim 38 herein in that it fails to disclose a DVB system for transmitting MPEG-4 data resources the system comprising: a system capable of transporting URIs for accessing MPEG-4 resources embedded in an DSM-CC U-U OC; and a transmitter with the capability to accept or retrieve packetized DSM-CC U-U OC resources. Djupsjobacka teaches a system which uses DSM-CC U-U OC which includes having the capability retrieving packetizing resources through included address data. Therefore it would have been obvious to modify the method of claim 26 of copending Application No. 10/670,949 such that the receiving terminal would be an MPEG-4 ready receiving terminal as taught in Pereira which would be used to receive packetized resources accessed through DSM-CC U-U OC addressing methods as taught in Djupsjobacka.

This is a provisional obviousness-type double patenting rejection.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-11, 13-35, and 37-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pereira et al. ("The MPEG-4 Book") in view of Djupsjobacka et al. (EP 0 854 650 A2).

Regarding claim 1: Pereira discloses a method for receiving of MPEG-4 data resources broadcast in a European Digital Video Broadcasting (DVB) network (see [section 3], [section 3.1.3], [section 7.4] for broadcasting and receiving MPEG-4 over DVB), the method comprising: receiving an MPEG-2 Transport Stream, with a packetized object (see [fig. 7.13], [section 7.4.1.3] for packetized objects); locating a uniform resource locator (URL) which reads on a universal resource identifier (URI) in the TS; in response to the URL, accessing an address in the object; in response to accessing the address, retrieving MPEG-4 resources; and, decoding the MPEG-4 resources (see [section 3.1.2] for locating a URL; finding the resource pointed to by the URL, and [section 3.1.3] for retrieving and decoding the resource by assembling a presentation from such MPEG-4 content).

Pereira does not teach using a terminal specifically designed for DVB multimedia with a packetized DSM-CC User-to-User Object Carousel where the address accessed points to the DSM-CC U-U OC and where the resources are retrieved from the DSM-CC U-U OC.

Djupsjobacka however teaches a terminal capable of complying with the DVB definitions and where DSM-CC protocols are used to support interactive digital video broadcasting applications. Djupsjobacka further teaches the

application of User-to-User and DSM-CC OC address modifications for additional benefits received from the located URL (see [fig. 2a item 7], [fig. 6, item 28], [pg. 2, ll. 41-44], [pgs. 3-4, ll. 41-2], [pg. 5, ll. 20-32], [pg. 7, ll. 2-29], [pg. 7, ll. 52-55]).

At the time the invention was made it would have been obvious to one of ordinary skill in the art to use DSM-CC U-U OC protocols, as taught in Djupsjobacka, when transmitting MPEG-4 resources through a MPEG-2 transport stream, as taught in Pereira, because using the DSM-CC U-U OC protocols enables additional resource management benefits such as hierarchic naming, and program server assignment to individual names (see [pg. 3, ll. 50-54]).

Regarding claim 14: Pereira discloses a method for broadcasting pointers to MPEG-4 data in a European Digital Video Broadcasting (DVB) network (see [section 3.1.2], [section 7.4] for broadcasting information that points to MPEG-4 data over DVB), the method comprising: embedding MPEG-4 resources; packetizing the objects in an MPEG-2 transport stream (TS); using a uniform resource locator (URL) for accessing MPEG-4 resources located at an address; embedding the URL in an MPEG-2 TS; and, broadcasting the MPEG-2 TS (see [7.4.3.1] embedding and packetizing resources in MPEG-2 TS; see also [section 3.1.2], [section 3.1.8] for a URL used for accessing MPEG-4 resources; see also [section 7.4] for broadcasting MPEG-4 over a MPEG-2 TS).

Pereira does not teach the generation of the URL or the use of a DSM-CC U-U OC in the methods used to broadcast.

Djupsjobacka teaches the generation of the URL and using DSM-CC U-U OC methods for broadcasting digital packets (see [pgs. 3-4, ll. 41-2]).

At the time the invention was made it would have been obvious to one of ordinary skill in the art to generate a URL and use DSM-CC U-U OC protocols, as taught in Djupsjobacka, when providing a means of access to MPEG-4 resources through a MPEG-2 transport stream, as taught in Pereira, because using the DSM-CC U-U OC protocols when generating a URL enables additional resource management benefits such as hierarchic naming, and program server assignment to individual names (see [pg. 3, ll. 50-54]).

Regarding claim 25: Pereira teaches a method of broadcasting MPEG-4 over MPEG-2 transport stream but does not teach a system for broadcasting.

Djupsjobacka discloses a European Digital Video Broadcasting (DVB) Multimedia Home Platform (MHP) terminal for receiving broadcast MPEG-4 data resources, the system comprising: a receiver having an interface for accepting an MPEG-transport stream (TS) with an embedded uniform resource indicator (URI) and a packetized DSM-CC User-to-User (U-U) Object Carousel (OC): an address access unit having an interface to accept the MPEG-2 TS from the receiver, the address access unit locating a URI in the TS, accessing an address, and retrieving MPEG-4 resources from the DSM-CC U-U OC; and, a decoder having an interface connected to the address access unit for receiving the MPEG-4 resources and an interface for supplying decoded MPEG-4 information (see [fig.

2a], [fig. 7], [pg. 2, ll. 45-52], [pgs. 3-4, ll. 41-2], [pg. 7, ll. 1-25], [pgs. 7-8, ll. 52-3]).

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to design a receiver for receiving MPEG resources, as taught in Djupsjobacka, to implement the methods of transporting MPEG-4 over MPEG-2 transport stream, as taught in Pereira, because a physical device is necessary to realize the benefits of using MPEG-4 broadcasting.

Regarding claim 38: Pereira teaches a method of broadcasting MPEG-4 over MPEG-2 transport stream but does not teach a system for broadcasting.

Djupsjobacka teaches a European Digital Video Broadcasting (DVB) system for transmitting MPEG-4 resources, the system comprising: an address pointer unit (APU) having an interface to supply an MPEG-2 transport stream (TS) with uniform resource identifiers (URIs) for accessing MPEG-4 resources embedded in an DSM-CC User-to- User (U-U) Object Carousel (OC), and to supply a MPEG-2 TS with the packetized DSM-CC U-U OC; and, a transmitter having an interface to accept the MPEG-2 TS, with the packetized DSM-CC U-U OC from the address pointer unit, and an interface to broadcast the MPEG-2 TS (see [fig. 2a], [fig. 7], [pgs. 3-4, ll. 41-2], [pgs. 4-5, ll. 57-19], [pg. 21]; [pg. 7-8, ll. 56-3] for a service name server (SNS) which reads on an address pointer unit; see also [claim 14], [claim 15]).

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to design a system for broadcasting MPEG resources, as

taught in Djupsjobacka, to implement the methods of transporting MPEG-4 over MPEG-2 transport stream, as taught in Pereira, because a physical system is necessary to realize the benefits of using MPEG-4 broadcasting.

Regarding claims 2, 15, 26 and 39: Pereria does not teach wherein accessing or generating an address in response to the URI includes accessing, generating or locating an address selected from the group including a local identifier (lid) and an http address in the DSM-CC U-U OC or where such addressing is supplied by an APU.

Djupsjobacka teaches the use of an address in name form which reads on a local identifier, in that the physical address can be changed while the address name remains the same, and use of an http address in the DSM-CC U-U OC which can be remembered more easily (see [pg. 4, ll. 11-15], [pg. 4, ll. 31-35], [pg. 7, ll. 8-20]; see also pgs. 7-8, ll. 56-3] for a service name server).

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to use an add an address which has a binding local identifier, as taught in Djupsjobacka, to reference MPEG-4 resources, as taught in Pereira, because a local address can be remembered more easily (see [pg. 4, ll. 31-33]).

Regarding claims 3,16, 27 and 40: Pereira does not teach wherein accessing or generating an address includes accessing or generating a lid URI providing a binding name and access scheme to the objects in the DSM-CC U-U

OC, as prescribed and restricted by MHP protocols or where such addressing is supplied by an APU.

Djupsjobacka teaches the creation of an address which accesses an URL address using a name, which reads on a lid URI because it provides a binding name and access scheme to the objects in the DSM-CC U-U OC designated by computer protocols, which reads on a multimedia home platform due to its ability to decipher and use MPEG-4 resources (see [pg. 3-4, ll. 24-2], [pg. 7, ll. 2-29], [pg. 7, ll. 52-55]).

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to use an add an address which has a binding local identifier, as taught in Djupsjobacka, to reference MPEG-4 resources, as taught in Pereira, because a local address can be remembered more easily (see [pg. 4, ll. 31-33]).

Regarding claims 4, 17, 28 and 41: Pereira teaches wherein URLs are used to locate resources in a type of carousel which repeats access units (AUs) selected from a BIFS scene description and an object descriptor stream (see [section 3.1.2], [section 3.1.5], [section 3.3.3]).

Pereira does not teach wherein this is done using lid URLs to provide a binding name and access scheme to the objects or where it is generated by an APU.

Djupsjobacka teaches creating and using an address in name form where the physical address can be changed while the address name remains the same

which is facilitated by the SNS. (see [pg. 4, ll. 11-15], [pg. 4, ll. 31-35], [pg. 7, ll. 8-20]; see also [pgs. 7-8, ll. 56-3]).

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to use an add an address which has a binding local identifier, as taught in Djupsjobacka, to reference MPEG-4 resources, as taught in Pereira, because a local address can be remembered more easily (see [pg. 4, ll. 31-33]).

Regarding claims, 5, 18, 29 and 42: Pereira in view of Djupsjobacka teaches wherein receiving an MPEG-TS, with a packetized MHP OC, includes forming MPEG-4 resources in a hierarchical directory structure (see [fig. 3.1], [section 3.1], [section 7.4.1.3] for having a hierarchial structure within a MPEG-TS).

Pereira does not teach where the resources are embedded in a hierarchical directory structure by an APU.

Djupsjobacka teaches a service name server that functions in accordance with the methods of the disclosed invention (see [pg. 6, ll. 21-24], [pgs. 7-8, ll. 56-3]).

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to use a physical device such as a service name server, as taught in Djupsjobacka, to implement the methods proposed for using a hierarchal structure for addressing MPEG-4 resources, as taught in Pereira, because a device is necessary to implement the method.

Regarding claim 6, 19, 30 and 43: Pereira teaches the use of hierarchal structuring of information (see [section 3.1]) but does not teach wherein forming a hierarchical directory structure includes forming a hierarchical directory structure of BIOP objects including a DSM::ServiceGateway, a DSM::Directory, DSM::Stream, and a DSM::File or where this is formed by an APU.

Djupsjobacka teaches a hierarchical structure which includes a DSM::ServiceGateway, DSM::Directory, DSM::Stream, and DSM::File and where the structure is formed by a service name server (see [pg. 6, ll. 21-24], [pg. 7, ll. 2-15], [pgs. 7-8, ll. 56-3]).

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to use directories which have a hierarchal structure to provide access to files, as taught in Pereira, when structuring information, as taught in Pereira, because structuring how information is stored provides more efficient access to data.

Regarding claims 7, 20, 31 and 44: Pereira teaches a method of broadcasting MPEG-4 over MPEG-2 transport stream (see [section 7.4]).

Pereira does not teach wherein retrieving MPEG resources from the MHP OC, in response to accessing the address, includes: locating a DSI message; extracting the IOR for the Service Gateway; parsing the Service Gateway object; extracting IORs for Directory, Stream, and File objects from the Service Gateway binding structure; and, acquiring MPEG-4 resources from the Stream and File objects.

Djupsjobacka teaches locating an indication message which contains module identification information (which reads on service gateway) whereby the module_id information contained within the message is extracted from the packet and divided (parsed) so that resources can be retrieved on the basis of the service component name and the resources are received from the data transmission stream using the set top box (see [pg. 7, ll. 18-29]; see also [pg. 2, ll. 41-44] where the steps which proceed retrieving, the reverse operations used to embed the TS prior to receiving, are known to have been conducted in the processes described herein).

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to one of ordinary skill in the art to retrieve MPEG-4 resources, as taught by Pereira, by accessing the resource address information, as taught in Djupsjobacka, because it is common for MPEG resource data, whether it be MPEG-2 or MPEG-4 data, to be referenced by some form of address information (see [pg. 4, ll. 11-13]).

Regarding claim 8, 21, 32 and 45: Pereira teaches transporting MPEG-4 content over a MPEG-2 transport stream (see [section 7.4]) and ability to link media streams (see [3.1.4], [3.1.6], [3.1.7] for linking media streams) but does not teach receiving an MPEG-2 TS, with a packetized MHP OC, includes receiving a first MPEG-2 TS and a second MPEG-2 TS with a packetized MHP OC.

Djupsjobacka teaches wherein receiving an MPEG-TS, with a packetized multimedia home platform (terminal or computer) OC, includes receiving multiple transport streams (which would include a first and second) with a packetized MHP OC (see [pg. 2, ll. 16-19], [pg. 3-4, ll. 55-2] for multiple transmission streams); wherein locating a URI in the TS includes retrieving a lid URI in the first MPEG-2 TS ; and, wherein retrieving MPEG resources (which reads on objects that would be transmitted in an MPEG-4 TS) from the MHP OC, in response to accessing the lid URI, includes retrieving said MPEG resources from the second MPEG-2 TS MHP OC (see [pg. 4, ll. 13-15], [pg. 4, ll. 33-35] for the use of lid URLs; see also [pg. 5, ll. 6-10] for combined streams which are received by a set top box at which time a viewer picks out a service for viewing; see also [pg. 5, ll. 20-32] for retrieving address information such as URLs from one of the multiple streams or resources such as HTML pages, news, or a TV program; see also [pg. 2, ll. 41-44] where the steps which proceed retrieving, the reverse operations used to embed the TS prior to receiving, are known to have been conducted in the processes described herein).

At the time the invention was made, it would have been obvious to one of ordinary skill in the art that MPEG-2 and MPEG-4 media streams can be linked through addressing, as taught in Pereira, when receiving data in a type of MHT OC, as taught in Djupsjobacka, because linking multiple data streams in required to synchronize a scene to a media stream.

Regarding claims 9, 22, 33 and 46: Pereira in view of Djupsjobacka discloses wherein retrieving or embedding MPEG-resources from MHP OC, in response to accessing or using an address, includes retrieving or embedding MPEG-4 resources selected from the group including audio, video, and systems data (see [section 3.3.3], [section 7.4], [section 7.4.3] for being capable of retrieving and embedding audio, video and systems data).

Pereira does not teach where the resources are embedded using an APU.

Djupsjobacka teaches a service name server that functions in accordance with the methods of the disclosed invention (see [pg. 6, ll. 21-24], [pgs. 7-8, ll. 56-3]).

Regarding claims 10, 23 and 24: Pereira in view of Djupsjobacka discloses wherein decoding with a decoder the MPEG-resources includes an action selected from the group including enhancing audio data in the MPEG-2 TS, enhancing video data in the MPEG-2 TS, and using the systems data to establish an interactive audiovisual scene and communication link (see [section 3.3.2], [3.3.3] for enhancing audio and video by synchronizing events defined in the access units).

Regarding claims 11 and 35: Pereira in view of Djupsjobacka discloses the method comprising: establishing an interactive audiovisual scene and communication link in response to decoding MPEG-4 systems data (see [section 7.4.3.1] where timing relations which are maintained for MPEG-4 data streams).

Pereira does not teach where said method is enabled by a system using a transmitter having a transmit interface and receiver to do so.

Djupsjobacka teaches using a transmitter with an interface which communicates with a receiver to enable said communication link (see [abstract], [fig. 2a], [fig. 7], [pg. 2, ll. 1-6], [pg. 4, ll. 11-20]).

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to design a transmitter with an interface, as taught in Djupsjobacka, to implement the methods of establishing an interactive scene as taught in Pereira, because it is necessary to have a physical device capable communicating to create a communication link.

Regarding claims 13, 24, 37 and 47: Pereira in view of Djupsjobacka discloses wherein accessing an address in response to the URI includes additionally accessing an address selected from the group including a local cache address and a Web protocol identifier; and, the method further comprising: retrieving MPEG-4 resources, in response to accessing the address, from a source selected from the group including a local cache and a website (see [section 3.3.1] for playback of received content such as a presentation from a local file or in a unicast streaming; see also [section 3.1.6] for real time streaming protocol used in internet streaming applications).

Pereira does not teach generating addresses using an APU.

Djupsjobacka teaches creating addresses using a service name server which is a part of the data transmission network system (see [pg. 4, ll. 11-15], [pg. 4, ll. 31-35], [pg. 7, ll. 8-20]; see also [pgs. 7-8, ll. 56-3]).

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to design a device capable of generating addresses, as taught in Pereira, as taught in Djupsjobacka, to be used for embedding in to the MPEG-2 transport stream, as taught in Pereira, because a physical device is necessary to implement the creation of the content filled transport stream.

2. Claims 12 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pereira et al. ("The MPEG-4 Book" published by Prentice Hall PTR, July 20, 2002) in view of Djupsjobacka et al. (EP 0 854650 A2) and Carsten Herpel ("Elementary Stream Management in MPEG-4" published in IEEE, March 1999).

Regarding claims 12 and 36: Pereira does not teach method or system comprising: caching the retrieved MPEG-4 resources.

Herpel however teaches caching MPEG-4 resources (see [pg. 1, Introduction, section 1], [fig. 6], [pg. 6 section A] for storing access units in a storage buffer of stream data until a later time; see also [pg. 8, section D] for storing received data in a separate file).

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to store MPEG-4 resources, as taught in Herpel, when receiving MPEG-4 data, as taught in Pereira, because resources received by the MPEG-4 transport stream may need to be accessed at a later time.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason Thomas whose telephone number is (571) 270-5080. The examiner can normally be reached on Mon. - Thurs., 8:00 a.m. - 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Koenig can be reached on (571) 272-7296. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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